Amendments to the Claims

Amend claims 1-7, 9-15, 17-23, 25, 32 and 33.
Cancel claims 8, 16 and 24.
Add new claims 34-36.
Claims 26-31 were previously canceled.

In the last Office action, which was mailed on March 29, 2004, claims 1, 2, 4, 8 and 9 were rejected and claims 3, 5-7, 10-25, 32 and 33 were withdrawn from consideration as not being readable on the elected invention or the elected species. By this amendment, claims 3, 10-12, 17 and 18 have been amended so as to read on the elected species; new claims 34-36, which read on the elected species, have been added; and claims 8, 16 and 24 have been canceled. Claims 5-7, 13-15, 19-23, 25, 32 and 33 stand withdrawn but nevertheless, have been amended so that when a generic claim such as claim 1 is allowed, these claims will be in form for allowance as well.

The following listing of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) A gas inflation/evacuation system and sealing system ~~removeably connectable~~ removably connectible to a proximal portion of a guidewire assembly which has an occlusive balloon at a distal portion thereof, comprising:

means for evacuating ~~air from~~ the guidewire assembly; ~~and~~

means for introducing a biocompatible gas into the guidewire assembly to inflate [[an]] the occlusive balloon ~~proximate a~~ at the distal ~~end~~ portion of the guidewire assembly a plurality of times; ~~and~~ and,

means for selectively sealing the ~~proximal portion of the~~ guidewire assembly by forming successive permanent airtight seals at ~~one of a plurality of~~ separate locations ~~to form one of a plurality of airtight seals~~ along the proximal portion of the guidewire assembly to retain the biocompatible gas in the occlusive balloon a plurality of times, the means for selectively sealing including a mechanism selected from the group of mechanisms consisting of a crimping mechanism and a plugging mechanism.

2. (currently amended) The gas inflation/evacuation system and sealing system of claim 1, wherein the ~~gas inflation/evacuation system is~~ means for evacuating, the means for introducing a biocompatible gas, and the means for selectively sealing constitute a handheld apparatus.

3. (currently amended) The gas inflation/evacuation system and sealing system of claim 2, wherein the means for selectively sealing includes a first aperture into which the proximal portion of the guidewire assembly is selectively insertable, a second aperture to which the means for evacuating and the means for introducing a biocompatible gas are ~~into a first aperture of the handheld apparatus and the gas inflation/evacuation system is~~ operably connected, and ~~to a second aperture of the handheld apparatus, the handheld apparatus comprising~~ an airtight passageway connecting the first aperture and the second aperture.

4. (currently amended) The gas inflation/evacuation system and sealing system of claim 1, wherein the ~~means for sealing comprises~~ mechanism is a crimping mechanism.

5. (withdrawn) The gas inflation/evacuation system and sealing system of claim 4, wherein the crimping mechanism comprises:

a first ~~depressable~~ roller and a second ~~bias offset~~ roller proximately spaced from the first roller for traversal of the proximal portion of the guidewire assembly, the first roller being connected to a ~~depressable lever~~ handle with a pivotable cam arrangement such that force on the handle causes the first roller to proportionately approach the ~~offset~~ second roller, a first threshold force on the handle causing sealing of the proximal portion of the guidewire assembly and a second threshold force on the handle causing severing of the proximal portion of the guidewire assembly.

6. (withdrawn) The gas inflation/evacuation system and sealing system of claim 5, wherein the ~~depressable lever~~ handle is spring biased for an automatic return to an open starting position upon the cessation of a ~~depressable~~ force.

7. (withdrawn) The gas inflation/evacuation system and sealing system of claim 1, wherein the ~~means for sealing comprises~~ mechanism is a plugging mechanism that selectively inserts a plug of material into the proximal portion of the guidewire assembly while maintaining an airtight seal between the guidewire assembly and the ~~inflation/evacuation system~~ means for evacuating and the means for introducing a biocompatible gas.

8. (canceled)

9. (currently amended) The gas inflation/evacuation system and sealing system of ~~claim 8~~ claim 1, wherein the means for evacuating, the means for introducing a biocompatible gas, and the means for selectively sealing are contained in a sterile packaging ~~is packaged in a vessel~~ filled with a biocompatible gas and ~~any~~ wherein all gas within the sterile packaging ~~when packaged~~ is ~~only the biocompatible gas~~ selected from the group consisting of carbon dioxide, oxygen, and nitrous oxide.

10. (currently amended) A gas inflation/evacuation system and sealing system ~~removeably connectable~~ removably connectible to a proximal portion of a guidewire assembly which has an occlusive balloon at a distal portion thereof, comprising:

a first syringe ~~system~~ that selectively evacuates ~~air from~~ the guidewire assembly; ~~and~~

a second syringe ~~system~~ that selectively introduces a biocompatible gas into the guidewire assembly to inflate [[an]] the occlusive balloon ~~proximate a~~ at the distal ~~end~~ portion of the guidewire assembly a plurality of times; ~~and~~

a sealing ~~system~~ assembly ~~removeably connectable~~ removably connectible to the proximal portion of the guidewire assembly, the sealing assembly including a mechanism that selectively seals the ~~proximate~~ proximal portion of the guidewire assembly at one of a plurality of separate locations to form one of a plurality of successive permanent airtight seals of the guidewire assembly[[.]]; and,

a valve arrangement that selectively opens and closes communication between the sealing assembly and the first syringe and between the sealing assembly and the second syringe.

11. (currently amended) The gas inflation/evacuation system and sealing system of claim 10, wherein the ~~gas inflation/evacuation system and the sealing system are arranged as parts of~~ first syringe, the second syringe, and the sealing assembly form a handheld apparatus and wherein the sealing assembly includes a first aperture into which the proximal portion of the guidewire assembly is selectively insertable, a second aperture to which the first and second syringes are ~~into a first aperture of the handheld apparatus and the gas inflation system is~~ operably connected, and ~~to a second aperture of the handheld apparatus, the handheld apparatus comprising~~ an airtight passageway connecting the first aperture and the second aperture.

12. (currently amended) The gas inflation/evacuation system and sealing system of claim 10, wherein the ~~sealing system comprises~~ mechanism is a crimping mechanism which permanently deforms and decrimps the proximal portion of the guidewire assembly.

13. (withdrawn) The gas inflation/evacuation system and sealing system of claim 12, wherein the crimping mechanism comprises:

a first ~~depressable~~ roller and a second ~~bias offset~~ roller proximately spaced from the first roller for traversal of the proximal portion of the guidewire assembly, the first roller being connected to a ~~depressable lever~~ handle with a pivotable cam arrangement such that force on the handle causes the first roller to proportionately approach the ~~offset~~ second roller, a first threshold force on the handle causing sealing of the proximal portion of the guidewire assembly and a second threshold force on the handle causing severing of the proximal portion of the guidewire assembly.

14. (withdrawn) The gas inflation/evacuation system and sealing system of claim 13, wherein the ~~depressable lever~~ handle is spring biased for an automatic return to an open starting position upon cessation of a ~~depressable~~ force.

15. (withdrawn) The gas inflation/evacuation system and sealing system of claim 10, wherein the ~~sealing system comprises~~ mechanism is a plugging mechanism that selectively inserts a plug of material into the proximal portion of the guidewire assembly while maintaining an airtight seal between the guidewire assembly and the ~~inflation/evacuation system~~ first and second syringes.

16. (canceled)

17. (currently amended) The gas inflation/evacuation system and sealing system of ~~claim 16~~ claim 10, wherein the first and second syringes, the sealing assembly, and the valve arrangement are contained in a sterile packaging ~~is packaged in a vessel~~ filled with a biocompatible gas and ~~any~~ wherein all gas within the sterile packaging ~~when packaged~~ is ~~only the biocompatible gas~~ selected from the group consisting of carbon dioxide, oxygen, and nitrous oxide.

18. (currently amended) A gas ~~inflation/deflation~~ inflation/evacuation system and sealing system selectively operably ~~connectable~~ connectible to and removable from a proximal portion of a guidewire assembly which has an occlusive balloon at a distal portion thereof, comprising:

a ~~hand-held structure~~ handheld unit including a crimping mechanism having a first aperture and a sealing mechanism having a second aperture, there being a passageway extending from the first aperture to the second aperture for receiving ~~with a lumen defined therebetween such that~~ the proximal portion of the guidewire ~~is insertable into the first aperture~~ assembly;

~~a sealing mechanism housed within the handheld structure and positioned along at least a portion of the lumen to sealably engage the proximal portion of the guidewire;~~

~~a crimping mechanism operably arranged to selectively crimp the guidewire at a point along the proximal portion of the guidewire;~~

a first syringe system that selectively evacuates ~~air from~~ the guidewire assembly;

a second syringe system containing a volume of a biocompatible gas sufficient to inflate [[an]] the occlusive balloon ~~proximate a~~ at the distal ~~end~~ portion of the guidewire assembly a plurality of times; and,

conduits operably connecting the first syringe system and the second syringe system to the second aperture of the ~~hand-held structure~~ handheld unit, the conduits including a valve arrangement that selectively connects only one of the first syringe system and the second syringe system to the second aperture at a time.

19. (withdrawn) The gas inflation/evacuation system and sealing system of claim 18, wherein the second syringe system includes a plurality of individual syringes, each individual syringe containing a sufficient volume of biocompatible gas to inflate the occlusive balloon one time.

20. (withdrawn) The gas inflation/evacuation system and sealing system of claim 18, wherein the crimping mechanism comprises:

a first ~~depressible~~ roller and a second ~~bias offset~~ roller proximately spaced from the first roller for traversal of the proximal portion of the guidewire assembly, the first roller being connected to a ~~depressible lever~~ handle with a pivotable cam arrangement such that force on the handle causes the first roller to proportionately approach the ~~offset~~ second roller, a first threshold force on the handle causing sealing of the proximal portion of the guidewire assembly and a second threshold force on the handle causing severing of the proximal portion of the guidewire assembly.

21. (withdrawn) The gas inflation/evacuation system and sealing system of claim 20, wherein the ~~depressible lever~~ handle is spring biased for an automatic return to an open starting position upon cessation of a ~~depressible~~ force.

22. (withdrawn) A gas inflation/evacuation system and sealing system removably ~~connectable~~ connectible to a proximal portion of a guidewire assembly which has an occlusive balloon at a distal portion thereof, comprising:

a ~~hand-held structure~~ handheld unit including a crimping mechanism having a first aperture and a sealing mechanism having a second aperture, there being a passageway extending from the first aperture to the second aperture for receiving ~~with a lumen defined therebetween such that~~ the proximal portion of the guidewire ~~is insertable into the first aperture~~ assembly;

~~a sealing mechanism housed within the handheld structure and positioned along at least a portion of the lumen to sealably engage the proximal portion of the guidewire;~~

~~a crimping mechanism operably arranged to selectively crimp the guidewire at a point along the proximal portion of the guidewire;~~

~~a first~~ an evacuating syringe ~~system~~ that selectively evacuates ~~air from~~ the guidewire assembly; and,

a plurality of ~~syringe systems~~ inflation syringes, each inflation syringe ~~system~~ containing a volume of a biocompatible gas sufficient to inflate [[an]] the occlusive balloon ~~proximate a~~ at the distal ~~end~~ portion of the guidewire assembly a ~~plurality of times~~ single time.

23. (withdrawn) The gas inflation/evacuation system and sealing system of claim 22, further comprising:

conduits operably connecting the ~~first~~ evacuation syringe ~~system~~ and the plurality of ~~syringe systems~~ inflation syringes to the second aperture of the ~~hand-held structure~~ handheld unit, the conduits including a valve arrangement that selectively connects only ~~one of~~ the ~~first~~ evacuation syringe ~~system and~~ or the plurality of ~~syringe systems~~ inflation syringes to the second aperture at [[a]] one time.

24. (canceled)

25. (withdrawn) The gas inflation/evacuation system and sealing system of ~~claim 24~~ claim 22, wherein the handheld unit, the evacuation syringe, and the plurality of inflation syringes are contained in a sterile packaging ~~is packaged in a vessel~~ filled with a biocompatible gas and ~~any~~ wherein all gas within the sterile packaging ~~when packaged~~ is ~~only the biocompatible gas~~ selected from the group consisting of carbon dioxide, oxygen, and nitrous oxide.

26-31. (canceled)

32. (withdrawn) A gas inflation/evacuation system and sealing system removably ~~connectable~~ connectible to a proximal portion of a guidewire assembly which has an occlusive balloon at a distal portion thereof, comprising:

a first syringe system that selectively evacuates ~~air from~~ the guidewire assembly; ~~and~~

a second syringe system that selectively introduces a biocompatible gas into the guidewire assembly to inflate [[an]] the occlusive balloon ~~proximate a~~ at the distal ~~end~~ portion of the guidewire assembly a plurality of times; and

a ~~sealing system~~ plugging mechanism removably ~~connectable~~ connectible to [[a]] the proximal portion of the guidewire assembly that selectively seals the proximal portion of the guidewire assembly at one of a plurality of separate locations to form one of a plurality of successive permanent airtight seals of the guidewire assembly, including:

a first aperture and a second aperture in fluid communication, the first aperture being capable of receiving therethrough the proximal portion of the guidewire assembly, and the second aperture being removably attachable to a conduit;

an operational ~~o-ring~~ O-ring in coaxial alignment ~~and contained within~~ with the first aperture for operational engagement of the proximal portion of the guidewire assembly at a location proximal of ~~some insertion distance through~~ the first aperture;

a sealant ~~o-ring~~ O-ring in coaxial alignment ~~and contained within~~ with the first aperture ~~whereby it is distally~~ and proximally spaced from the operational ~~o-ring~~ O-ring such that further insertion of the proximal portion of the guidewire ~~into the body,~~ assembly through the first aperture [[,]] and past the

operational ~~o-ring~~ O-ring will bring the proximal portion of the guidewire assembly into engagement with the sealant ~~o-ring~~ O-ring; and,

a sealant ~~containment~~ confinement layer for receiving the proximal portion of the guidewire assembly some distance past the ~~insertion of the guidewire through the~~ sealant ~~o-ring whereby~~ O-ring, the sealant ~~containment~~ confinement layer ~~includes~~ confining sealant material such that insertion of the proximal portion of the guidewire ~~into~~ assembly through the sealant ~~containment~~ confinement layer and into the sealant material forces the sealant material into the proximal portion of the guidewire assembly.

33. (withdrawn) The gas inflation/evacuation system and sealing system of claim 32, wherein the sealant material is selected from the group consisting [[of:]] of wax, plastic, polymer, and metal.

34. (new) The gas inflation/evacuation system and sealing system of claim 1, wherein the means for evacuating comprises at least one syringe and the means for introducing a biocompatible gas comprises at least one syringe.

35. (new) The gas inflation/evacuation system and sealing system of claim 1, further comprising means for severing the proximal portion of the guidewire assembly distal to each successive permanent airtight seal to reopen the proximal portion of the guidewire assembly to release the biocompatible gas from the occlusive balloon.

36. (new) The gas inflation/evacuation system and sealing system of claim 10, further comprising a severing mechanism for removing the portion of the proximal portion of guidewire assembly containing a permanent airtight seal.